2006-2011

Strategic Information Technology Plan

March 2006

Wisconsin Department of Health and Family Services

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Introduction

Overview

Information technology (IT) influences every activity in the Department of Health and Family Services (DHFS). Therefore, the Department integrates its business and IT strategic planning processes to ensure alignment of IT directions with business goals. The Strategic Information Technology Plan should be viewed in context of the Department's business plan. It serves as our roadmap for leveraging technology in our business processes and is intended to guide the development of more detailed implementation plans. As IT improves, we will be able to perform our mission better, faster, and cheaper. Leveraging technology in our business processes requires:

- Complete understanding of the Department's mission.
- Employment of best business practices.
- Implementation of structured and standardized architectures.
- Process-driven systems development.
- Partnership with all stakeholders.
- Clarity of the business requirements.
- Effective management and protection of information as a strategic resource.

The Department's Business Plan lists five strategic goals. These goals are listed below. The Department's goals and strategies have IT implications, and the IT directions outlined in this document address these implications. They serve as strategic guideposts for IT resource investments over the next 5 years. These directions are also consistent with the Statewide Enterprise IT Initiatives.

Strategic Business Plan Goals

The Department's strategic goals support its mission: Promote and protect the health and safety of Wisconsin people.

1. Promote the health and safety of all people in Wisconsin, emphasizing prevention.
2. Foster access to quality, affordable health care and treatment for all people and manage Medicaid cost effectively.
3. Implement long-term care reform.
4. Increase opportunities for children to grow up safe, healthy and successful in strong families.
5. Provide public services that are effective, efficient and accountable while holding down taxpayer costs.

Information Technology Vision

> *To facilitate the programmatic goals of the Department through dependable, seamless technology resources with secured access to comprehensive, quality data using integrated enterprise facilities.*

IT Directions

User-Centric Computing Environment

Maintaining a user-centric computing environment continues to be a top IT priority for the Department over the next 5 years. We will provide the knowledge worker the technology tools and support they need, when and where needed. This includes:

- Providing a highly available and resilient network.
- Managing the business tools life cycle (hardware/software/applications).
- Supporting workflow and technology appropriate for the mobile and home-based worker.
- Ensuring business partners have adequate technology capabilities.

E-Readiness

E-Readiness is aligning our technology environment with statewide strategic initiatives to conduct business electronically. This includes:

- Maintaining and enhancing the technical infrastructure to support e-government.
- Integrating existing applications.
- Fulfilling data access and security requirements.
- Reengineering paper-based business processes to conduct Web-based business.
- Strengthening the use of the Web as a communication and service-delivery vehicle.
- Standardizing access to data and information.
- Leveraging statewide infrastructure, technical services, and security initiatives.

Quality Information for Programs

Quality Information for Programs is providing accurate, timely, comprehensive information for program operations and management. This includes:

- Collecting and sharing quality data across all programs.
- Adopting national standards for data format and content.
- Improving data accessibility, especially where data is used across functional areas.
- Developing capabilities for program decision support and outcome measures.
- Implementing security and privacy requirements.
- Integrating applications.

IT Enablement of Best-Business Practices

IT Enablement of Best-Business Practices is conducting business effectively and efficiently through the best use of technology. This includes:

- Employing best practices for using and supporting technology.
- Using technology to replace more costly manual functions.
- Sustaining technical expertise of knowledge workers.
- Clarifying, publishing, and disseminating IT standards.

Guiding Principles

The Department will apply technology solutions to meet its programmatic needs within these parameters. Technology use will:

- Be business driven.
- Be cost effective.
- Be timely.
- Be responsive to change.
- Follow best practices and methodologies.
- Create integrated enterprise systems.
- Add value.

- Protect data as a valuable asset.
- Result in quality outcomes.

Architectures

Applications Architecture

Applications are the automated programs people use to do their work and accomplish the Department's mission. The application architecture provides the structure for developing the Department's electronic business applications. It includes an application development methodology responsive to our business needs and the appropriate technical environment for creating and deploying applications. The application architecture will:

- Deliver applications that are business driven, affordable, scaleable, easy to maintain, adaptable to new business requirements, and portable across one or more hardware platforms and operating systems.
- Promote partnering between the user community and IT staff.
- Use modern technology tools.
- Leverage statewide technology initiatives.

Strategies

- Apply effective project management and application development methodologies.
  - ✓ Use the IT Business Consultants as the primary client liaison to assist divisions and offices with defining and articulating their business requirements, deliverables, and scope throughout a project's life cycle. The consultants will ensure IT solutions are tailored to a business unit's unique needs.
  - ✓ Use a decision-making, project approval process for determining when to proceed with internal application development versus procuring either an off-the-shelf application package or design services from an outside contractor.
  - ✓ Reuse application components to the greatest extent possible when developing internal applications.
  - ✓ Design applications to meet business requirements within fiscal and time constraints.
  - ✓ Include operations and maintenance costs in application development funding requests.
  - ✓ Migrate to Web-based application development technologies.
  - ✓ Apply consistent application security design across platforms and integrate security in the application development methodology.
  - ✓ Develop and implement an evaluation system to assure our processes are effective and efficient.
- Develop a flexible, integrated health and human services applications architecture.
  - ✓ Support solution choices appropriate to meet business needs from small to large systems development.
  - ✓ Employ a multi-tier, modular application architecture by designing separate presentation, business logic, and database components to improve maintainability and enable reuse.
- Acquire and maintain appropriate application development tools.
  - ✓ Use commercial-off-the-shelf products that are industry leaders with a solid growth path.
  - ✓ Employ development tool workbenches on large development projects to integrate modeling, construction, and testing.

      ✓ Establish and maintain development tool standards to achieve consistency across the enterprise.

- Develop and procure applications that use enterprise data management principles and common data standards.
- License and sell, when appropriate and permissible, the Department's applications to outside entities, such as health departments in other states.
- Leverage statewide and department-wide enterprise applications when appropriate.

Data Architecture

The Department will accomplish its mission through the expert use of accurate, timely, and comprehensive information. The data architecture provides the framework for integrating, managing, and using department data. The data architecture will:

- Be responsive to our business needs and goals.
- Provide for data integration.
- Enhance program areas' ability to more easily meet state and federal reporting requirements and assess program outcomes.
- Improve cross-program reporting and analysis for enhanced enterprise decision making.
- Improve data access, sharing, integrity, and security.

Strategies

- Provide and implement the tools, procedures, and practices required to manage information as a valuable resource.
  - ✓ Create and implement common data standards for defining, using, and sharing our data.
  - ✓ Inform and guide program areas on available technology options for data warehousing and data marts.
  - ✓ Use data modeling in our applications development methodology to support a more integrated data environment.
  - ✓ Minimize redundant data capture and storage.
  - ✓ Implement electronic document and records management.
- Use address standardization and verification technologies to enhance the quality of address information.
- Strengthen security mechanisms to ensure data integrity and protection of confidential/private data.
- Implement "fair information practices" for protecting privacy of personal information, such as those promulgated in the Health Insurance Portability and Accountability Act (HIPAA) privacy rule.

Technology Architecture

Presently, the Department primarily leverages its own technology architecture to manage and deliver program services. Upon completion of technical consolidation, the Department will leverage the State's enterprise technology architecture provisioned by the Department of Administration (DOA) through the Shared Information Services data center. The technology architecture provides our hardware and software direction. It includes the desktop computers, portable computing devices, servers, routers, switches, gateways, wiring; and software products required to host and operate our applications, perform office automation functions, and communicate and conduct business electronically. The technical architecture will:

- Be based on standards to support state and department-wide systems integration.
- Sustain adequate technology infrastructure capacity to meet our current and future business and program needs.
- Be cost effective to support and maintain business processes.
- Be reliable, robust, and adaptable to change.
- Enable the Department to leverage technology opportunities in fulfilling its business strategies.

Strategies

- Fully engage in the consolidation of DHFS technical infrastructure and services with DOA's Division of Enterprise Technology (DET) to continue efficient and effective support for DHFS programs. Sustain existing DHFS technical infrastructure until completion of consolidation.
- Define and implement effective problem reporting and change management processes with our external technical service providers.
- Research and implement new assistive technologies, when appropriate.
- Employ portable and/or wireless solutions for business needs, such as laptop computers, tablets, personal digital assistants, and cellular devices, when appropriate.

Organization Architecture

To fulfill the other IT architecture strategies, the Department will develop and support an organizational structure that optimizes the use of its IT staff resources and administrative processes. It will maximize the talents and expertise of all employees toward efficient and effective technology use. The organizational architecture is IT's human resource framework. To successfully leverage technology in its business functions, the Department requires skills and expertise in the following core IT competencies: external service provider management, desktop and customer support, Internet/intranet use, applications development, data and database administration, testing, research, enterprise architecture, information resource management, job production, security, IT consultancy, policy development, project management, strategic planning, and budget development. The organizational architecture will enable the Department to:

- Assign and train staff to support core IT competencies.
- Provide an appropriate level of IT-related training to all employees.
- Effectively use external service providers where cost effective.
- Use consultants and contractors when and where appropriate to extend resources and supplement skills and expertise.
- Manage projects effectively—on time and within budget.

Strategies

- Define and communicate IT staff roles and responsibilities, policies, procedures, standards, and decision-making processes.
- Enhance the IT staff's customer relationship management skills and expertise.
- Establish processes for improving coordination and communication between IT staff, internal/external end users, and business partners.
- Invest in the appropriate level of IT training for all Department employees to maximize technology use and instill good personal computing habits.

- Acquire appropriate skills for Department IT service providers to apply new technologies through training, recruitment, and contract services.
- Employ a consistent, formal, project management methodology for developing and implementing IT projects.
- Further promote project management best practices by using a consistent and formal project management methodology, facilitating project portfolio management, certifying Project Managers, and developing/maintaining a DHFS Project Management Training track.
- Improve contract management and oversight capabilities.
- Coordinate technical activities with other agencies to identify opportunities for collaboration to achieve potential staff and/or technology efficiencies.
- Define and implement an optimum governance structure and decision-making process for IT strategies and operations.
- Fully participate in the strategic IT direction setting at the statewide level.

Security Architecture

Efficient and effective security management is critical to protecting the availability, integrity, and confidentiality of our electronic information. We must closely monitor our security tools and processes to ensure compliance with federal and state laws and regulations, and consistency with sound security practices. Our employees must be knowledgeable about the Department's IT security policies and their security responsibilities. As well, information security officers must have skills in all aspects of security, from using monitoring tools, to reviewing security reports, to setting internal security procedures. DHFS will work closely with public and private business partners, especially DET as it hosts increasingly more of our IT services. The security architecture will:

- Mitigate security risks to the network, systems, applications, and data.
- Raise employee security awareness.

Strategies

- Migrate from a provider to a user of IT security services: determine security performance requirements, establish service level agreements, and monitor service levels.
- Create security plans and reviews to meet federal, State, and Department requirements, including HIPAA and 45 CFR 95.621 requirements for federally funded systems.
   - ✓ Establish a process to classify the Department's information assets and apply the appropriate level of security controls.
- Develop, document, and employ an ongoing security risk management process for the network, administrative processes, and computer applications.
   - ✓ Implement a recurring risk assessment process.
   - ✓ Manage security risks by mitigating vulnerabilities identified in the risk assessment process.
- For IT resources managed by DHFS, use state-of-the-art security technologies and methodologies on the network, servers, and computers to make information accessible to those who need it and protect it from those who do not.
   - ✓ Connect each new application to the common security infrastructure and update existing applications as circumstances permit.
   - ✓ Identify and authenticate network and application users.

- ✓ Protect network and application integrity through intrusion monitoring, detection, and mitigation.
- ✓ Employ patch management and anti-virus measures on all computers and network servers.
- ✓ Implement secure Internet e-mail.
- ✓ Maintain and enhance security infrastructure consistent with statewide direction to ensure technical compatibility.
- ▪ Train and educate users and security officers on the State and Department IT security policies, sound security practices/tools, and their responsibilities in protecting the Department's information assets.
  - ✓ Maintain an ongoing security awareness program with adequate funding for training and conducting security awareness activities, including publishing articles, pamphlets, posters, and other promotional material.

Strategic Initiatives and Projects

We identified our strategic-level initiatives and projects with IT implications. They align with the Governor's goals, and the Department's business goals, IT directions, and IT architectures as shown in the mapping in Appendix A. Returns on Investment (ROI) Worksheets for new projects with IT implications are included in Appendix B. Critical Project Checklists for new "critical" projects to begin in FY07 are included in Appendix C.

The Department will:

- Ensure business and programmatic needs drive IT proposals.
- Give higher priority to projects fulfilling or supporting federal mandates or state statutes.
- Seek opportunities for integrating Division/Office-level projects into a Department or State-enterprise project effort when advantageous.

Client Assistance for Re-employment and Economic Support (CARES) System

The Wisconsin CARES system supports income maintenance operations administered by the Department. CARES determines eligibility for Medicaid (including BadgerCare, Family Care, and SeniorCare), FoodShare, the SSI Caretaker Supplement, Wisconsin Works, and the Child Care subsidy programs. The strategic direction for CARES supports the evolving business models of DHFS, DWD, and local partners. Goals included in this strategic direction include:

- Making systems more flexible and minimizing competition for resources.
- Making the system easier to use, focusing on the client not the system.
- Enhancing the system to increase program integrity and payment accuracy.
- Improving customer service for partners and customers.

This initiative aligns with the Department's goals to develop effective, efficient, accessible human service systems and foster communications with partners. On July 1, 2005, DHFS and DWD completed the project to transition CARES management. There are currently three primary projects associated with the CARES initiative. These projects will be developed and implemented to the extent CARES funding remains available.

- **CARES Worker Web**: Converting from a mainframe to a Web-based user interface for local agency workers over the course of four phases. The first phase of this project rolled out during 2005. There are multiple phases planned for implementation during 2006. The planned completion of this project is Q2 2008.
- **ACCESS Wisconsin (Access to Eligibility Support Services for Health and Nutrition)**: Creating an integrated, Web-based tool to enable customers and advocates to do a self-assessment of potential program eligibility for FoodShare, Medicaid, SeniorCare, BadgerCare, WIC and other state and local programs. This tool will also enable submission of applications through the Internet, change reporting, and a case and benefit information query function for Medicaid and FoodShare. The first phase of this project was to complete the self-assessment capability for FoodShare, Family Medicaid/BadgerCare, and SeniorCare. This was completed in August 2004. In 2005, there were two additional phases implemented including the ability for clients to check benefits and support for Medicare-D. During 2006 the final two phases will be implemented, which include on-line application for benefits and the ability to report eligibility status changes. Also during 2006, Spanish accessibility will be implemented system-wide. During 2007, ACCESS will become the primary client portal for information stored in the MMIS.
- **Electronic Case File**: Moving the retention of necessary supporting documentation and forms for the income maintenance program eligibility determination currently done in paper case files to an electronic case file using scanning to capture and store images. Scanning

of documentation and forms would be handled in local agencies and centrally. Statewide rollout will take place during CY 2006 with a focus on Milwaukee County for the first 6 months of the rollout period.

Cross-Agency Administrative Efficiencies

The Cross-Agency Administrative Efficiencies initiative promotes cooperation with the DOA on the Accountability, Consolidation, and Efficiency Initiative projects, and reuse of our application code or sharing application code with other state agencies. Potential cross-agency initiatives include the following:

- **Criminal/Caregiver Background Checks**: The Department will explore an electronic connection to the Department of Justice's Crime Information Bureau's data system for the retrieval of criminal histories for potential employees and license applicants. Currently, the Department is required by §§ 48.685 and 50.065, Wis. Stats., to complete caregiver background checks on license applicants and potential employees. Additionally, under § 146.50, Wis. Stats., the Department is required to do criminal background checks on license applicants. In FY04, 7,992 caregiver background checks were completed and 73 criminal background checks were done with the potential for 18,700 additional criminal checks. By eliminating duplicative keying, the Department has the potential of streamlining the process and recapturing hundreds of hours of staff time that can be more efficiently directed to other tasks. On 9/22/05, the electronic Integrated Background Check Information System (eIBIS) was moved into production. During FY06, the Department consulted with the Department of Public Instruction, the Office of the Commissioner of Insurance, and other agencies with similar requirements to create a system architecture that can be used across the enterprise to perform bus driver background checks. The decision was made to track finger print results using the TCN on DOJ INTCH systems.

- **Scheduling, Timekeeping, Task Reporting, Cost Allocation, and Payroll**: The state's timekeeping/payroll systems are past their useful life and do not meet current human resource needs. DHFS supports scheduling, timekeeping, task reporting, cost allocation, and payroll processes through a series of old systems, interfaces with DOA, and manual processes for over 6,000 employees, many of whom work in 24 X 7 settings. The Department's seven institutions have requirements for a scheduling system to meet complex 24 hours-per-day, 7 days-a-week staff scheduling needs. A system that would meet their scheduling requirements would also need to include timekeeping and cost accounting functionality that would interface with the Department's human resources, timekeeping, payroll, and accounting systems. Satisfying these business needs would enable scheduling processes to be consistently applied across institutions, reduce staff resources needed to manually do scheduling and timekeeping, improve scheduling decisions, and reduce overtime requirements and costs. The Department estimates it will cost approximately $1.2 million for the biennium to purchase a scheduling system for institution personnel. An RFP was released in FY04 and a contract was awarded to API and signed in February 2005. The Department is still engaged in the pilot implementation of the system at Mendota Mental Health Institute (MMHI). Preliminary discussion has occurred with the Department of Corrections about their interest but further analysis is pending completion of the MMHI implementation. Review and evaluation of the solution to meet all of DHFS' timekeeping, scheduling, task reporting, cost allocation, and payroll system needs and possibly provide a base system that could meet all the State of Wisconsin's enterprise needs would also follow successful initial implementation in the institutions.

- **Technical Infrastructure and Services Consolidation:** Several initiatives to consolidate agency technical infrastructure and services statewide are underway. One of these initiatives is the Shared Information Services Initiative. DHFS is supporting this through

additional Department initiatives, up to and including the transfer of technical service functions, infrastructure, and qualified personnel and positions to DET. Technical functions being consolidated include file/print services, server administration, desktop support, network management, application hosting, and e-mail. In FY05, the Department upgraded selected technologies to enable alignment with the State's enterprise architecture, so the State can realize the eventual cost savings and efficiencies expected through consolidation. These included upgrades to Microsoft SQL and Oracle database software. Also, the Department replaced or upgraded 4,500 desktop and laptop computers with Microsoft Windows XP-compliant hardware and completed the upgrade of the Microsoft operating system in February 2005. The Microsoft Office productivity application suite upgrade was completed by the end of FY05. The primary focus for FY06 and FY07 is to support and complete the statewide services and hardware consolidations, so DOA can offer agency business areas reliable, enhanced services at a reduced cost.

Electronic Records and Online Information

Chapter 69, Wisconsin Statutes, requires the Department to provide a secure method for transferring and storing information related to registering, archiving, updating, and issuing copies of vital records. This project will provide access through a Web-based electronic registration system for authorized vital record business partners who complete and file birth, death, marriage, and divorce records; and fetal death reports. The system will also provide a Web-based accounting and record copy issuance system to be used at the state and local registration office level and will provide a uniform platform for the conversion of numerous non-integrated legacy systems. The proposed system is a comprehensive solution for the essential processes of a state vital records program using an enterprise technology architecture. It will provide appropriate, secure access anytime and anywhere to authorized vital records filers; reduce the dependence on manual searches or batch data uploads; and make processing vital records more timely and efficient. The state vital records system provides critical services needed by all Wisconsin citizens who require documentary proof of identity or of the facts of a vital event. Additionally, other programs within the Department and other state and federal agencies need access to this data to manage their case files more efficiently and reduce fraud. The system will also provide real-time death reporting essential to bio-terrorism surveillance activities. This project advances long-term solutions to preserve and protect vital records, maximizes partnerships, ensures data security, meets the Department's e-government goals, migrates vital records data systems into an enterprise technology architecture, and furthers enterprise data sharing initiatives. The project is a high priority for the Department. Internal resources are being used to the extent they are available.

Health Insurance Portability and Accountability Act

The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) aim to reduce the cost of health care by increasing the automation of administrative processes through the adoption of national standards. HIPAA mandates standards for electronic billing and related administrative transactions while protecting the security and privacy of the individual health information involved. The law is being implemented through a series of new regulations including provisions for monetary and criminal penalties for non-compliance. Throughout the 2006-2011 plan period, DHFS will continue to revise and/or enhance its existing business processes and information systems and create new policies and procedures as needed to implement these regulations.

▪ The Privacy Rule governs the use and disclosure of protected health information. It requires continued refinement of policies and procedures including ongoing workforce training. Significant work is involved in ongoing interpretation and application of the requirements.

- The Security Rule governs the integrity and confidentiality of electronic protected health information. To comply with this rule, DHFS performed a comprehensive and thorough security risk assessment in 2004 for organizations, systems and networks covered by HIPAA. Changes to address areas needing improvement will continue to occur during 2006. This assessment and change cycle will be regularly repeated thereafter.
- An upcoming rule for standards for electronic attachments to claims may require system changes in the future. However, the start date on this work is contingent on when the final rule is published.   The current status of the Notice of Proposed Rulemaking (NPRM) for Claims Attachment is the period for accepting comments ended January 23, 2006. Once comments are reviewed and the rule finalized, it will be published in the Federal Register and becomes mandatory 26 months after publication.
- Rules for National Provider Identifiers will require business process and computer changes during 2006 and 2007.

Integrated Care Management

The Department will leverage technology in the Mental Health Institutes, Secure Treatment Centers, and Developmentally Disabled Centers' business processes to provide quality care through an integrated care management system architecture. This architecture will improve client safety and care team communication and collaboration. It also helps the Department comply with federal regulations and certifying standards for hospitals that require data-driven operations. Meeting these standards ensures we continue to receive the federal funding contribution of over $20 million dollars to operate the State's care and treatment facilities. Additionally, an integrated system architecture will eliminate redundant data collection, enable data-driven decision-making, and raise productivity. We will use technology to support the creation and delivery of integrated, holistic client care and treatment plans and to effectively measure client outcomes and the effectiveness of treatments. The technical architecture will also have components to: effectively and efficiently schedule staff and events required to care for clients; provide resident trust fund accounting services; accomplish billing/collections and supply/inventory services; collect demographic data for client profiling; and support clinical operations, such as recording, storing, and retrieving medical records and documentation. This strategic initiative is a high priority. Planning is underway and has been funded with internal resources to date. To the extent internal resources remain available, work on this initiative will continue. The architecture will be developed in phases as funds and resources become available. Two projects initiated in FY03 to achieve some of the goals set out in this initiative are:

- **Institution Staff Scheduling and Timekeeping:** Information is included under the Cross-Agency Administrative Efficiencies initiative on page 11.
- **Treatment Management:** The mental health institutes and secure treatment centers are implementing a treatment planning and progress notes system to improve clinical documentation, reporting, and outcomes assessment. This functionality will be provided by a commercial-off-the-shelf (COTS) software system procured through a competitive bid in FY04.   The software vendor experienced a business reorganization in the spring of 2005 which interrupted the timeline for a pilot implementation of the system planned for October, 2005. The Department is now engaged with the software vendor on the most appropriate direction for the project.

Integrated Public Health Data and Emergency Preparation/Response

The Department is required by s. 250.07 (4) to coordinate activities within state government involving the collection, retrieval, analysis, reporting, and publication of statistical information related to health and health care. Additionally, recent national events demonstrated the need

for an improved, unified, statewide approach to addressing public health emergency and terrorism preparation and response. These needs are considered a high priority for the Department. Currently, several hundred DHFS data applications independently collect and track public health data. The applications do not interoperate, so the opportunities to share data or conduct comprehensive analyses are difficult. To perform the complex tasks of public health data integration, DHFS has endorsed the federal-level concept of the Public Health Information Network (PHIN). The objectives of the PHIN initiative are to improve and expedite delivery of the public health response in case of a public health emergency or terrorist event and to provide a modern, state-of-the-art system for public health practice, surveillance, and service delivery. This strategic initiative will provide the framework for integrating and sharing local, state, and national public health data.

In FY06-08, DPH will acquire, pilot, and implement a statewide Wisconsin Electronic Disease Surveillance Systems (WEDSS). This system will provide integrated surveillance and case management for reporting and follow-up of notifiable conditions and environmental events. Electronic reporting will be via web entry and directly from laboratories.

The Department's state health plan, *Healthiest WI 2010,* initiatives and priorities support an integrated public health information and data system architecture. Resources for projects initiated to build this system architecture may be requested from state funds, money appropriated by Congress to the Centers for Disease Control and Prevention (CDC), and other federal grants. This initiative will replace the existing independently operated databases with a secure Web portal containing applications to collect, integrate, analyze, and share data. The goal is to provide value and timeliness to public health service delivery by creating systems with an emphasis on enterprise functionality (i.e., cross-program, as well as local, state, and national data integration) and using a build it once, reuse it many times focus when constructing and compiling Web business software components. The system architecture includes secure sign-on; advanced network and server security; an integrated data repository; SOAP/ XML/HL7 messaging; automated data visualization, GIS, and reporting; LDAP personnel directory/Role-Based Access Control; secure collaboration/knowledge management and distance training; and automated emergency alerting.

Long-Term Care Redesign

The Long-Term Care Redesign project is a high Department priority and a strategic direction for the State. The Department is pursuing the goal set by the Governor in his State of the State address to expand the long-term care Family Care program statewide in five years. Long-term Care Redesign will improve and protect health and well being; develop effective, efficient, accessible human service systems; apply best knowledge for achieving positive impact; and foster best business practices.

The Family Care Long-Term Care Redesign Information Systems project is developing and enhancing the Long-Term Care functional eligibility screening tool to provide consistent, Web-based functional eligibility determinations statewide. The Family Care project will also provide the Department with the infrastructure necessary to collect and process data into meaningful management information necessary to administer the new long-term care delivery system in a managed care environment. This will be done by streamlining and eliminating redundancies in the data collection processes, improving the consistency of the data by transitioning to standard encounter reporting formats, enhancing the tools available to analyze the data in the Department's data warehouse, and by improving the access to the data in the warehouse with Web technology. It will also support the enhancement of Department and local systems and processes to attain HIPAA compliance, where required. The project will continue the systems development strategy initiated for the Family Care program, by using and building upon existing systems, and providing technical assistance and support to the development of local agency

operations and automation. The project may be funded through potential federal funding, including federal grants.

The plan continues to phase in redesign elements in non-project counties. The Web-based Long Term Care (LTC) Functional Screen (eligibility tool) has been implemented state-wide for the Community Options Program (COP) and home and community-based waivers. Additional phases under development and planned for implementation during 2006 include: 1) Expand the application of the LTC Functional Screen to be able to use it for automation of MA Personal Care eligibility and prior authorization for services and allowable hours of reimbursement for those hours. The intent is to link this process with the COP and waiver eligibility process; 2) Enhance the capacity for data collection and analysis; and 3) Provide assistance to additional counties to develop and/or enhance their programmatic information and assistance service, but there may be value in establishing some statewide consistent application.

The Children's Long-Term Support (CLTS) Redesign goals are to provide a seamless, family-centered, and cost-effective system of care for children with disabilities and their families. Specifically the long-term support functional screen for children has been implemented as a Web-based application. Critical elements of this Web-based system will be security of confidential information, stability of critical data, and ease of use and accessibility of the system for end users. The initial version of the Children's functional screen was implemented state-wide during the last year. We plan to continue to enhance the Social Security Disability Determination (SSDD) logic which allows the screen to support the Social Security Income (SSI) determination process.

 The CLTS Redesign will also require any necessary updates to the current Human Services Reporting System (HSRS) for the Family Support Module, the Birth to 3 Program, the Long-Term Support Module, and Mental Health Module in response to changes or development of new MA Waivers. The changes required to the databases may include collection of basic demographic information, cost and service data, ability to link to the Medicaid Management Information System (MMIS), and data collection to measure quality and system outcomes. Accessibility to collected data is being enhanced by selectively publishing data on the Department's web site for use by Department staff and reporting entities.

The Mental Health and Alcohol and Other Drug Abuse (MH/AODA) Redesign initiative is a county-based demonstration that will test a transition from a fee-for-service environment to a more managed system of care. This will require management information systems reengineering at the Department and county levels. The project will build upon existing systems and provide technical support for the development of local and state agency operations. The redesigned information system will support the implementation, management, and evaluation of the MH/AODA initiative. It will also enable the Department to support performance-based contracting through collection of required data elements.   A Web-based mental health functional screen was developed and implemented throughout the state last year. In 2006, the current Human Services Reporting System (HSRS) will require necessary updates to meet expanded federal reporting requirements for both treatment and prevention outcome indicators. MH/AODA initiatives integrated with the expansion of SSI-managed care will leverage use of the encounter data reporting systems developed under the Medical Assistance program.

Medicaid Management Information System (MMIS) Design, Development, and Implementation (DDI)

In January 2005 the Division of Health Care Financing awarded a contract to EDS to design, develop, and implement a new MMIS and to provide Fiscal Agent services (MMIS/FA). The contract was competitively bid and will meet the informational, operational, and administrative

needs necessary to support the day-to-day management of the multi-billion dollar Wisconsin Medicaid program. The objective of the MMIS and Fiscal Agent contract is to incorporate the latest advances in computer hardware, software, utilization management, and program management techniques to improve the efficiency and effectiveness of Wisconsin's Medicaid and other State health care program operations. DDI completion is scheduled to be January 2007 and is a high priority project for the Department.

Roadmap to Integrated Health and Human Services Architecture

The Roadmap to Integrated Health and Human Services Architecture initiative melds the IT needs of State, Local Health Departments, and Human Service agencies with the Department's objectives of implementing enterprise and integrated data systems. The goals of this initiative are to develop an enterprise architecture for health and human services systems and initiate projects to implement the architecture, improve data and system integration, save taxpayer dollars, streamline government, reduce State and Local administrative costs, and ensure long-term IT investment value over the next 5 years. The Department is collaborating with its external stakeholders to gain their commitment and begin planning for potential projects to achieve the goals set out in this initiative. The Department continues to analyze possible funding sources for this initiative. The planning phase will:

- Assess integration and/or consolidation of existing systems.
- Review legacy systems, particularly sunset systems and develop a strategy for retiring these systems and replacing the functionality they provide.
- Review of new technology development initiatives for enterprise applicability.
- Include a broader "vision" of health and human service businesses that includes partners at the local level.

Appendix A

Mapping of IT Initiatives/Projects to DHFS Business Goals, IT Directions, and IT Architectures.

		Client Assistance for Re-employment & Economic Support (CARES)	Cross-Agency Administrative Efficiencies	Electronic Records and Online Information	Health Insurance Portability and Accountability Act	Integrated Care Management	Integrated Public Health Data and Emergency Preparation/Response	Long-Term Care Redesign	Medicaid Management Information System (MMIS) Design, Development & Implementation	Roadmap to Integrated Health & Human Services Architecture
DHFS Goals	Promote the health & safety of all people in Wisconsin, emphasizing prevention.	X		X	X	X	X	X	X	X
	Foster access to quality, affordable health care & treatment for all people, and manage Medicaid cost effectively.	X		X			X		X	X
	Implement long-term care reform.	X				X		X	X	X
	Increase opportunities for children to grow up safe, healthy & successful in strong families.	X		X		X	X	X	X	X
	Provide public services that are effective, efficient & accountable while holding down taxpayer costs.	X	X	X	X	X	X	X	X	X
IT Directions	User Centric	X	X	X		X	X	X	X	X
	E-Readiness	X	X	X	X		X	X	X	X
	Quality Information for Programs	X	X	X	X	X	X	X	X	X
	Best Practices	X	X	X	X	X	X	X	X	X
IT Architectures	Applications	X	X	X	X	X	X	X	X	X
	Data	X	X	X	X	X	X	X	X	X
	Organization		X			X				X
	Technology	X	X	X	X		X	X	X	X
	Security	X	X	X	X	X	X	X	X	X

Appendix B

Return On Investment (ROI) Worksheets and Other Pertinent Information for New Projects.

<u>**General Information**</u>

Project Name: WEDSS   DIN # (if appropriate)
Agency: DHFS
Contact Name: Ted Ohlswager   Phone: 267-9007
Email: ohlswts@dhfs.state.wi.us

Project Description - please describe the project (i.e., what it is, who will use it, how it will be used, etc.

The Wisconsin Electronic Disease Surveillance System (WEDSS) is an integrated, statewide, web-based system for surveillance and management of communicable diseases and other notifiable conditions, and environmental hazards and other events. WEDSS will be used by the Division of Public Health; county, city and tribal health departments; health practitioners reporting notifiable conditions, and laboratories submitting test results. The system will provide the following.

- Electronic reporting of communicable disease and environmental exposure information from doctors/clinics/nurses/laboratories to state and local health departments and to the CDC.
- Patient and case management for cases of communicable diseases and environmental investigations for the state health department and for local health departments.
- Surveillance and management of outbreaks of communicable diseases and environmental hazards.
- Early event detection through evaluation of trends in data provided in a timely manner.

The system is required by the Centers for Disease control and will comply with its standards and requirements for a national electronic disease surveillance system (NEDSS) and a national Public Health Information Network (PHIN).

Summary Goals

☒ The project will reduce the cost of performing business function(s). If so, please explain

Currently multiple systems, both electronic and paper based, are used within the State of Wisconsin to report, manage and control communicable diseases and environmental events, and for reporting of laboratory results. The health departments involved in this process are DPH and 92 city, county and tribal local health departments. Local health

departments receive reports of cases of communicable disease via paper forms, faxes or telephone calls. Follow-up activities to gather additional information are collected in local data systems or on paper, and then sent via paper/fax/phone to the State. The goal for the new system is to provide an electronic web-based process for providers/clinics/nurses to report and manage cases of communicable diseases and environmental events. All entered data would reside in a shared database accessible to both local and state health departments for follow-up activities and surveillance.

☐ This project will increase revenue. If so, please explain

☒ This is a mandated project (e.g., federal or state statute, lawsuit). Please specify the mandate and impact of non-compliance

CDC requires this system, compliant with its published standards, as a condition of receipt of public health preparedness funding. This is a principal funding source for Wisconsin state and local public health. Failure to implement a compliant surveillance system would result in recapture of significant amounts of federal funding.

☐ This project replaces at-risk technology. Is this ◻ twilight (obsolescent) or ◻ sunset (obsolete) technology?

☒ The project is needed to comply with agency, enterprise or federal IT standards. If so, please explain

See above. CDC requires State health departments to pass certification for its PHIN standards, as a condition of funding. A NEDSS and PHIN compliant surveillance system is necessary to meet these standards.

☒ This project is essential to citizen health, safety, privacy or security. Please explain

Wisconsin can not adequately protect the public health of its citizens against daily risks or emergencies including bioterrorism and pandemics without an automated system for disease and environmental event surveillance and management, early event detection, and outbreak management.

☒ This project directly supports a Governor's initiative. Please explain

The Governor's e-Health initiative requires Wisconsin's participation in the national health information network program. Both initiatives seek to automate and exchange information in patient and other health records for 1-improved health care practice based on complete and up-to-date information, 2-increased patient involvement through access to personal health records, 3-better research for improved evidenced-based practice based on accurate and readily available information, and 4-public health empowerment by timely access to quality data for early event detection and trend

analysis (epidemiology). WEDSS provides the core electronic capabilities for public health to participate in and contribute to these endeavors.

It is also a priority of the Governor to prepare for a possible influenza pandemic.

Project Schedule
Project Start Date (MM/YYYY) 11/2005   Project End Date (MM/YYYY) 06/2008

Project Risks
Infrastructure *(Check one)*

☐ New Development / Major Reengineering (Higher risk)
☐ Upgrade / Maintenance (Lower risk)

Application *(Check one)*

☐ New Development / Major Reengineering (Higher risk)
☐ Maintenance / Minor Enhancements (Lower risk)

The system is being acquired, not developed.

<u>Business Complexity</u> - Does this project require major changes to business processes?

☒ Yes   ☐ No   If yes, please briefly explain

Current processes are either paper based or use disjointed, immature applications. Processes will need to adjust to an integrated, comprehensive system that will provide higher quality data more timely and automate many processes.

High Profile Project - Is this a project of interest to the legislature, other political entities, or advocacy groups? Does it involve participants such as citizens, federal or local government, business?

☒ Yes   ☐ No   If yes, please explain

Involves nearly 100 local agencies and related public health boards, up to 150 laboratories, many hundreds of reporters, federal CDC.

Technical Complexity - Projects are considered technically complex if they involve multiple platforms, many interfaces, and new technologies. Please rate technical complexity.

☒ High Complexity   ☐ Average Complexity   ☐ Low Complexity

We intend to implement WEDSS consistent with Service Oriented Architecture concepts, which promises excellent benefits but involves more complexity in its set-up.

Other Risks
Please briefly explain any other risks or dependencies

Risk Mitigation
Please briefly explain how the risks with the project are mitigated

Our major risk mitigation strategy is using commercial-off-the-shelf products whenever possible. Also, we are requiring compliance with (emerging) federal standards for interoperability.

FUNDING

Describe the proposed fund sources for the project lifecycle (developmental through operational). Please specify by fiscal year. To use the form, please double-click in the chart below to use it as a Microsoft Excel spreadsheet for calculations.

Funding Sources	FY 2007 Amount	FY 2008 Amount	FY 2009 Amount	FY 2010 Amount	FY 2011 Amount	Totals
Base Budget $*						
GPR, PR, SEG, etc.	$0	$0	$0	$0	$0	$0
New Ongoing $*						
GPR, PR, SEG, etc.	$0	$0	$0	$0	$0	$0
New One time $*						
PR-F (CDC)	$1,400,000	$1,200,000	$700,000	$700,000	$700,000	$4,700,000
PR (Milwaukee Health Dept)	$200,000	$200,000	$200,000	$200,000	$200,000	$1,000,000
Total New Funding	**$1,600,000**	**$1,400,000**	**$900,000**	**$900,000**	**$900,000**	**$5,700,000**
Funding Totals	**$1,600,000**	**$1,400,000**	**$900,000**	**$900,000**	**$900,000**	**$5,700,000**

_Master Lease? Yes _____   No_____

DHFS may request use of master lease for initial software license purchase if multi-year payment terms can not be negotiated with the vendor.

Specify the proposed source of funds, including the appropriation, and whether master lease will be used. Add as many rows and columns as necessary to fully describe the proposed funding strategy for the entire project lifecycle for all cost components (i.e., business as well as IT). Please document assumptions and include explanatory text as necessary below

Milwaukee Health Department is contributing to the initial purchase. We anticipate they will contribute to the ongoing costs as well.

CDC funding is a combination of public health, hospital, and pandemic influenza preparedness grant money. All federal funding is one time.

<u>Return on Investment (ROI) Calculation</u> - To use the spreadsheet, please double-click in the chart below.

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total
Recurring Cost:						
DET Services						$0
Agency Maintenance						$0
Agency Contractor						$0
Agency Licensing						$0
Other Agency Costs						$0
Decrease in Revenue						$0
Recurring Costs	$1,094,000	$960,000	$900,000	$900,000	$900,000	$4,754,000
Total One Time Costs (from One Time Spreadsheet)	$506,000	$440,000	$0	$0	$0	$946,000
Total Costs	$1,600,000	$1,400,000	$900,000	$900,000	$900,000	$5,700,000
Tangible Benefits:						
Staff Savings						$0
Contractor Savings						$0
Forms						$0
Postage						$0
Space						$0
Other Operational Savings						$0
Increase in Revenue						$0
Opportunity Valu	$2,500,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$22,500,000
Other Savings						$0
Total Benefits	$2,500,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$22,500,000
Benefits minus Total Costs equal Total Savings	**$900,000**	**$3,600,000**	**$4,100,000**	**$4,100,000**	**$4,100,000**	**$16,800,000**
Intangible Benefits						

One-Time Costs - *expressed as dollars. Please note this is not an active spreadsheet. Users will need to do calculations manually.*

	FY 2007	FY 2008	FY 2010	FY 2011	FY 2012	Total
One-Time Costs						
Agency Equipment						$0
Agency Software						$0
Agency Licenses						$0
Agency Staff						$0
Contractor Staff						$0
Agency Staff Training						$0
Agency Facilities						$0
Agency Comm. Installation						$0
Other Expenses						$0
						$0
Total-One Time Costs	$0	$0	$0	$0	$0	$0

Please list the assumptions associated with data used in the ROI calculation for this IT project, including any intangible benefits.

Increased staff productivity

- Due to efficiencies provided by the new system, we expect a significant improvement in staff productivity at the state and local levels for current tasks. This will enable staff resources to meet increasing high-priority demands without having to add additional FTE. This includes fully complying with current statutory requirements for reporting of notifiable diseases and following up on these reports.

Loss avoidance
- Five lives saved by early detection, outbreak management, or case management. Opportunity value: 5 saved lives * $1,000,000 (year 1 will only render 50%).

Appendix C

Critical Project Checklists for New Projects planned to begin in FY07.
None included.

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